Frontend technologies used in our case

2021-11-27 version by JV

SPA = **Single-Page Application**, Only one web page downloaded from the Web Server, but then with JS & AJAX that single page's DOM updated constantly. Showing/hiding certain Views so that it looks like we would have several Pages

React: SPA component library

 renders the output page (HTML+CSS+JS) DOM from 1) your Page template code (React Components inside React components) AND 2) the data provide by AJAX

react-dom: How react interacts with the browser DOM. Mappings, rendering etc.

shopify/Polaris: Shopify's React components for creating the admin plugins

shopify/app-bridge, shopify/app-bridge-react: These together allow e.g. Shopify authentication features in React app = in the plugin

https://www.npmjs.com/package/@shopify/app-bridge https://www.npmjs.com/package/@shopify/app-bridge-react

react-apollo, Enables GraphQL queries done by the React components

apollo-boost: Enables GraphQL queries

graphql: The JavaScript reference implementation for GraphQL, a query language for APIs created by Facebook.

Koa, koa-router, koa-session: Koa is a replacement for Express in the backend API creation and routing. Just because our Shopify-plugins are both React frontend apps and can also act as backends. Right?

shopify/koa-shopify-auth: Middleware to authenticate a Koa application with Shopify = Shopify working version of the Koa authentication.

https://www.npmjs.com/search?q=shopify%2Fkoa-shopify-auth

Not used or covered this time – Thus most are grayed out!

react router: SPA front-end routing between the Views (~like "going" to different page)

- though really just showing and hiding React Views
- we can also send parameter data while going to another View, e.g. id:s

Redux: Front-end side (=in browser memory) State management.

- part of the data model temporarily kept in browser memory (in Redux store/state)
- update frequency depends on the nature of the data (colors maybe not before next login, messages maybe polled/refreshed a lot more often)
- many components can share the same data

React-Redux: React components will be data- and event-bound to Redux store.

- actions dispatched to Redux code.
- redux store state bound to the React state of the components

React-Material-UI: Material-UI styled React components that share common theme and styles

• Those React components need to also be 1) Redux-connected and 2) React-routed!